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Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

METHOD FOR CORRECTING THE EFFECTS OF INTERDETECTOR BAND **BROADENING**

Application No.:

10/665,903

Inventor:

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Title:

Method for correcting the effects of interdetector band broadening

Date of filing:

September 18, 2003

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Attorney Docket No.:

WTC 0303

Pursuant to 37 CFR 1.97 (b) (3), the applicant herewith submits an information disclosure statement for the above referenced patent application. A close examination of the recent literature resulted in finding the referenced section of the textbook, Handbook of Size Exclusion Chromatography and Related Techniques, Marcel Dekker, New York, 2004. In the chapter by Barth and Jackson (pages 99 et seq.), the authors note the problems with interdetector band broadening at page 117 of their chapter. There they state

"... This effect can be corrected by injecting a narrow MWD sample and measuring the variance of the peaks in each detector. Because the peak shape is nearly Gaussian, it should, ideally, be the same for all detectors. If it is not, the additional variance can be calculated for one of the detectors. In subsequent data analysis, the narrower peak can be digitally broadened using Gaussian band spreading to correct for this mismatch..."

There are several ways this comment differs from what is disclosed in the present application. First, Barth and Jackson explicitly assume that both the peak shapes and the interdetector broadening kernel is Gaussian so that it can be characterized by simply measuring the variance of the peaks. The application, on the other hand, shows on both theoretical and practical grounds that the broadening is NOT Gaussian and makes no assumption about the peak shapes, so a more sophisticated analysis must be applied. Furthermore, the patent discloses an algorithm that may be used to determine the broadening parameters as well as the interdetector volume for any model.

Please feel free to call the undersigned should you have any comments or questions.

WYATT TECHNOLOGY CORPORATION

Philip J. Wyatt, Ph.D.

Chief Executive Officer and Agent for the Applicant, Wyatt Technology Corporation

U. S. P. T. O. Registration No. 32,449

Enclosure:

Information Disclosure Statement by Applicant (PTO/SB/08B)

Photocopy of chapter being disclosed

PTO/SB/08B (08-03)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known form 1449/PTO TRADEAP **Application Number** 10/665,903 INFORMATION DISCLOSURE **Filing Date** September 18, 2003 STATEMENT BY APPLICANT **First Named Inventor** Steven P. Trainoff Art Unit 2857 (Use as many sheets as necessary) **Examiner Name**

Attorney Docket Number

WTC0303

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	C. JACKSON, H. G. BARTH, "Molecular Weight Sensitive Detectors for Size Exclusion Chromatography," Chapter 4, Handbook of Size Exclusion Chromatography and Related Techniques (2nd Edition), Ed. Chi-san Wu, 2004, pp 99-138, Marcel Dekker, New York.					
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